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**Michigan Residential Code  
Shower Floor Liner Pitch**

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Technical bulletins are issued to provide clarification on issues that arise regarding code administration and enforcement. The information provided in the bulletin is developed to promote uniform interpretation and enforcement of the state codes by the Bureau of Construction Codes.

## MICHIGAN RESIDENTIAL CODE SHOWER FLOOR LINER PITCH

### Issue

The Michigan Residential Code requires finished floor shower receptors to slope uniformly toward the drain in Section P2709.1. This technical bulletin will address the best method to accomplish that requirement when considering code, materials, and methods of construction, and past installation procedures.

### Code

The Michigan Residential Code, 2000 edition (MRC)

References to slope are addressed in the following sections of the MRC:

#### P2709.1 Construction

Shower receptors shall have a finished curb threshold not less than 1 inch (25.4 mm) below the sides and back of the receptor. The curb shall be not less than 2 inches (51 mm) and not more than 9 inches (229 mm) in depth when measured from the top of the curb to the top of the drain. **The finished floor shall slope uniformly toward the drain not less than one-fourth unit vertical in 12 units horizontal (2-percent slope) nor more than 0.5 inch (12.7 mm)**, and floor drains shall be flanged to provide a watertight joint in the floor.

#### P2709.3 Installation

**Lining materials shall be pitched one-fourth unit vertical in 12 units horizontal (2-percent slope)** to weep holes in the sub drain by means of a smooth, solidly formed sub base, shall be properly recessed and fastened to approved backing so as not to occupy the space required for the wall covering, and shall not be nailed or perforated at any point less than 1 inch (25.4 mm) above the finished threshold.

(Emphasis added by author)

### Discussion

Past practices have been that the tile contractor, in site built installations, has completed the shower floor slope during their initial preparation. Further, it is understood that placing lining materials directly on the floor (often wooden sub floor) prevents grout or sloping material make up from cracking and shrinking which compromises the base structure.

When Section P2709.3 states that the lining shall be sloped, it appears to suggest that the licensed plumber is responsible for the slope of the liner.

Placing the lining material on a firm base when considering the lifetime length of the product is of the utmost importance. When the liner is placed on a flat surface the desired drainage into the weep holes will take place as proven by past practices.

### **Conclusion**

To provide the consumer with the best possible installation when considering cost and past installation practices, **THE FINISHED FLOOR SHALL SLOPE UNIFORMLY TOWARD THE DRAIN**, pitching the lining material will not be required.

Questions regarding this technical bulletin may be directed to the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes & Fire Safety, Plumbing Division, P.O. Box 30254, Lansing, MI 48909, or by calling (517) 241-9330.